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## **LISTING OF CLAIMS:**

Claims 1 and 2 (Canceled).

3. (Currently amended) A method according to claim 14, wherein Use according to claims 1 or 2, characterized by the fact that the galanthamine derivatives have the general formula

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$$Y_1$$
 $Y_2$ 
 $R_1$ 
 $R_3$ 
 $X_1$ 
 $X_2$ 
 $X_3$ 
 $X_4$ 
 $X_4$ 

and the salts thereof, wherein  $R_1$  is H, branched or straight chain  $(C_1-C_6)$  alkyl, Br,  $NO_2$ ,  $NR_5R_6$  wherein  $R_5$  and  $R_6$  are the same or different and are selected from H, branched or straight chain  $(C_1-C_6)$  alkyl, and wherein  $R_2$  is OH, branched or straight chain  $(C_1-C_6)$  alkyl, methoxy, phenyloxy or the following group

whereby Pol is a polymer, preferably one in accordance with WO-A1-01/174820, and wherein  $R_3$  and  $R_4$  either at the same time or alternatively are H, D, CN, straight chain or branched ( $C_1$ - $C_6$ ) alkyl or a carbonyl group together, wherein  $Y_1$  and  $Y_2$  alternatively are H or a group selected from:

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wherein n represents a value of 0, 1 to 15, and Pol has the meaning indicated above, and wherein  $Y_1$  and  $Y_2$  further represent together a carbonyl group (=O), =NH, = N-OR<sub>7</sub>, wherein R<sub>7</sub> is H, tosylate or branched or straight chain (C<sub>1</sub>-C<sub>6</sub>) alkyl, or  $Y_1$  and  $Y_2$  together is a group selected from:

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wherein  $R_8$  and  $R_9$  are the same or different and are H, branched or straight chain ( $C_1$ - $C_6$ ) alkyl, -( $CH_2$ )<sub>2</sub>-OH, CHO, CONH<sub>2</sub>, tBOC (tert-Butoxycarbonyl), or mean -COCOOH,  $R_{10}$  is H or CH3, and wherein when  $Y_1$  is -O-( $CH_2$ )<sub>2</sub>-OH,  $Y_2$  is OH, and wherein  $Z_1$  is H, branched or straight chain ( $C_1$ - $C_6$ ) alkyl, ( $C_2$ - $C_7$ ) alkenyl, ( $C_2$ - $C_7$ ) alkynyl, tri-fluoroacetyl, formyl, phenyl or a group selected from:

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(CH<sub>2</sub>)n-CH<sub>3</sub>  $-(CH_2)n-CN$ -(CH<sub>2</sub>)n-OH <sup>≿</sup>CH₂ (ĆH<sub>2</sub>)m (ĆH₂)m `s−cн₃ -CH<sub>3</sub> ·CH<sub>3</sub> ∠CH<sub>3</sub> ,o<sup>−CH</sup>₃ O-CH<sub>3</sub> O-CH<sub>3</sub> )\_O\_R11 O-R11

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wherein  $R_{11}$  is H, straight chain ( $C_1$ - $C_6$ ) alkyl, branched ( $C_1$ - $C_6$ ) alkyl or ( $C_2$ - $C_7$ ) alkenyl,  $R_{12}$  and  $R_{13}$  are the same or different and are selected from H, straight chain or branched ( $C_1$ - $C_6$ ) alkyl, phenyl, chlorophenyl, (trifluoromethyl)-phenyl or 1-naphtyl, wherein  $R_{14}$  is H, F, CH<sub>3</sub>, NO<sub>2</sub>, Cl, Br, J, CF<sub>3</sub>, n has the meaning indicated above, m is 0 or 1, and W has the meaning H or O, and wherein further  $Z_1$  and  $R_3$  form a common ring

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wherein R<sub>15</sub> and R<sub>16</sub> alternatively mean H, COOCH<sub>3</sub>, COOCH<sub>2</sub>CH<sub>3</sub>, CN, COCH<sub>3</sub>.

4. (Currently amended) A method according to claim 14, wherein the galanthamine Use according to claims 1 or 2, characterized by the fact that the used Galanthamine derivatives have the general formula Ib

$$H_3C^{-O}$$
 $H_3C^{-O}$ 
 $X$ 
 $Z_2$ 
Ib

selected from:

wherein  $Y_3$  and  $Y_4$  alternatively mean H and OH, X is Cl, Br or I,  $Z_2$  is oxygen (Noxide and no counterion), branched or straight chain  $(C_1-C_6)$  alkyl, or  $(C_2-C_7)$  alkenyl or  $(C_2-C_7)$  alkynyl or a group

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$$-(CH_2)n-N \qquad O \qquad -(CH_2)n-N \qquad -(CH_2)n-N \qquad R14$$

$$CH_3 \qquad CH_3 \qquad CH_3 \qquad CH_3$$

$$CH_2 \qquad -(CH_2)n-N \qquad R12$$

$$CH_3 \qquad R13$$

wherein n,  $R_{12}$ ,  $R_{13}$  and  $R_{14}$  have the meanings as defined in accordance with claim 3  $R_{12}$  and  $R_{13}$  are the same or different and are selected from H, straight chain or branched ( $C_1$ - $C_6$ ) alkyl, phenyl, chlorophenyl, (trifluoromethyl)-phenyl or 1-naphtyl, wherein  $R_{14}$  is H, F,  $CH_3$ ,  $NO_2$ , Cl, Br, J,  $CF_3$ , and n has the meaning indicated above.

5. (Currently amended) A method according to claim 14, wherein Use according to claims 1 or 2, characterized by the fact that the used galanthamine derivatives have the general formula Ic

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wherein  $Y_3$  and  $Y_4$  the meaning defined in accordance with claims 3 or 4 have alternatively are H or OH, and  $Z_3$  is oxygen (N-oxide and no counterion) or is a methyl.

6. (Currently amended) A method according to claim 14, wherein Use according to claims 1 or 2, characterized by the fact that the used galanthamine derivatives have the general formula Id

and their salts, wherein  $Y_5$  and  $Y_6$  alternatively are H or OH, or together form a keto group, and  $R_{17}$ ,  $R_{18}$ ,  $R_{19}$  are alternatively for two substituents H, wherein the third substituent is  $NH_2$  or  $CONH_2$ .

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7. (Currently amended) A method according to claim 14, wherein Use according to claim 1 or 2, characterized by the fact that the used galanthamine derivatives have the general formula Ie

$$H_3C-O$$
 $N-Z_4$ 

or their salts, wherein  $Z_4$  is straight chain or branched ( $C_1$ - $C_6$ ) alkyl or 4-brombenzyl.

8. (Currently amended) A method according to claim 14, wherein Use according to claims 1 or 2, characterized by the fact that the used galanthamine derivatives have the general formula If:

$$H_3C$$
 $OH$ 
 $R20$ 
 $If$ 

or their salts, wherein  $Y_5$  and  $Y_6$  have the meanings as defined in claims 3 to 7 alternatively are H or OH, and  $R_{20}$  is H or Br.

9. (Currently amended) A method according to claim 14, wherein Use according to claims 1 or 2, characterized by the fact that the used galanthamine derivative has the following structural formula

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and its pharmaceutical acceptable salts, hydrate or a solvate thereof and having the chemical name (4aS, 6R, 8aS)-6-Hydroxy-3-methoxy-11-methyl-4a,5,9,10-tetrahydro-6H-benzofuro[3a,3,2-f][2]benzazepinium.

- 10. (Currently amended) A method according to claim 9, wherein Use according to claim 9, characterized by the fact that the pharmaceutical acceptable salt counterion of (4aS, 6R, 8aS)-6-Hydroxy-3-methoxy-11-methyl-4a,5,9,10-tetrahydro-6H-benzofuro[3a,3,2-ef][2]benzazepinium is selected from the group of halides, preferably bromide, carboxylic acids with 1-3 carboxyl functions, particularly preferably tartrate, malonate, fumarate and succinate, and sulfonic acids, preferably methane sulfonic acid.
- 11. (New) A method according to claim 10, wherein the counterion is bromide.
- 12. (New) A method according to claim 10, wherein the counterion is selected from the group consisting of tartrate, malonate, fumarate and succinate.
- 13. (New) A method according to claim 10, wherein the counterion is methane sulfonic acid.

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(New) A method of treating post-operative delirium or subsyndromes of 14. post-operative delirium in a patient, comprising:

administering to the patient an effective amount of a compound selected from the group consisting of galanthamine and galanthamine derivatives exhibiting cholinergic activity.